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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,483	11/30/2001	Oprea Duta	3196-000161	6386

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EXAMINER

PICKARD, ALISON K

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 01/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/998,483

Applicant(s)

DUTA ET AL.

Examiner

Alison K. Pickard

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Claims 2-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group I, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in Paper No. 4.

2. The examiner has considered Applicant's arguments with respect to the restriction requirement. These inventions are distinct because the product as claimed can be made by another and materially different process (MPEP 806.05(f)) and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8-11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by DeHart (4,573,690).

DeHart discloses a wall and shaft assembly comprising a shaft 10 having a seal area 14 with a plurality of bumps 44 and a seal 20.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Polzin (3,348,430) in view of DeHart '690.

Polzin discloses a speed reducer comprising a housing, input shaft 33 and seal 50, output shaft 24 and seal 49, bearing journal, and gear journal. Polzin does not disclose a seal area with a plurality of bumps. DeHart teaches a shaft and seal assembly forming a seal area. DeHart teaches providing plural bumps on the seal area of the shaft. DeHart teaches that the bumps provide a uniform fluid film to support the seal and reduce friction. Reducing friction improves seal life and efficiency. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the sealing area of the shaft of Polzin with the bumps taught by DeHart to reduce friction, extend seal life, and improve sealing efficiency.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited discloses and teaches various seal areas having plural bumps.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alison K. Pickard whose telephone number is 703-305-0882.

The examiner can normally be reached on M-F (9-6:30), with alternate Friday's off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9326.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1113.



Alison K. Pickard
Examiner
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AP